
ISSUE REVIEW

Fiscal Services Division

November 7, 2019



Ground Floor, State Capitol Building

Des Moines, Iowa 50319

515.281.3566

Projected Major Maintenance Costs for Certain State Facilities

ISSUE

This **Issue Review** projects future growth of the major maintenance list for State facilities and estimates how quickly deferred maintenance may be eliminated with different levels of funding. The projection will account for inflation, different funding levels, future project requests, and the impact of funding specific buildings. The **Issue Review** will also describe the current major maintenance list, provide examples of funding scenarios, and explore the impact of those various scenarios.

AFFECTED AGENCIES

Alcoholic Beverages Division
All agencies on the Capitol Complex
Department of Administrative Services
Department of Cultural Affairs
Department of Corrections
Department of Human Services
Department of Public Safety

Iowa Law Enforcement Academy
Iowa Veterans Home
Iowa Public Television
Iowa Workforce Development
Terrace Hill
Department of Veterans Affairs

BACKGROUND — Major Maintenance List Development

The Department of Administrative Services (DAS) defines major maintenance as the following:

Major maintenance is defined as expenditures made beyond the regular, normal upkeep of physical properties (i.e., Land, Buildings, and Equipment) for the repair or replacement of failed or failing building components as necessary to return a facility to its currently intended use, to prevent further damage, or to make it compliant with changes in laws, regulations, codes, or standards. Tangible personal property as defined in the section "Routine Maintenance Definitions" shall not be eligible for major maintenance funds.

Examples: Roofs, boilers, windows, utility systems, safety systems, and projects intended to comply with building codes and regulations.¹

Responsibility to administer and maintain State buildings is determined in different ways depending on the location of the property, the occupying agency, and the use of the facility. The State of Iowa currently has approximately 64.0 million square feet in building space. The Department of Administrative Services develops and maintains a list of major maintenance projects on certain State facilities. The major maintenance list does not include facilities under the purview of a number of agencies. The Board of Regents, for example, maintains over 39.8 million square feet. Funding for the maintenance and upkeep of these facilities is provided for outside of major maintenance appropriations. A list of agencies that are not included on the

¹ Routine maintenance definition: Expenditures made for the regular upkeep of physical properties (i.e., Land, Buildings, and Equipment) including recurring, preventive, and ongoing maintenance necessary to delay or prevent the failure of physical properties. For purposes of this definition, building operational costs are not considered routine maintenance. Tangible personal property as defined in the "Routine Maintenance Definitions" is not eligible for routine maintenance funds.

major maintenance list is outlined in **Appendix A**. This **Issue Review** will only address agencies and facilities that are on the major maintenance list.

From a square footage perspective, the most significant facilities on the major maintenance list are occupied by the Department of Corrections (DOC), the Department of Human Services (DHS), and the 34 agencies on the Capitol Complex and at the Iowa Labs in Ankeny. These facilities serve a number of purposes including office buildings, laboratories, State Trooper facilities, prisons of varying security levels, the State Historical Building, and various DHS institutions. A full list of agencies on the Capitol Complex is available in **Appendix A**.

The major maintenance list is compiled quarterly by the DAS based upon requests for funding from State agencies. Agencies that receive support for major maintenance projects through the DAS are outlined in the table to the right. These projects are assessed for urgency and ranked in order of priority by the DAS. Each project is intended to restore infrastructure in question to its original state. The DAS also estimates the cost of the project. It is important to note that estimated project costs are based on experience and knowledge, but requested projects have not been out for bid and prospective contractors have not typically estimated the cost of the projects. The chart below provides a recent history of the total requests for major maintenance funding.

Major Maintenance Agencies by Square Feet (in thousands)

Department of Corrections	5,327	42.4%
Department of Human Services	3,462	27.5%
Capitol Complex	2,283	18.2%
Iowa Veterans Home	856	6.8%
Alcoholic Bev Division	182	1.4%
Department of Public Safety	161	1.3%
Department of Cultural Affairs	98	0.8%
IPTV	93	0.7%
Law Enforcement Academy	47	0.4%
Terrace Hill	31	0.2%
Veterans Affairs	28	0.2%

Project Requests on the Major Maintenance List by Year (dollars in millions)



Note: Changes in the method that projects are reported resulted in a sudden increase in the major maintenance list from FY 2013 to FY 2014.

The Design and Construction Resource Bureau, under the DAS, administers public improvement projects, including design services, contracting for construction, and construction management oversight. Generally speaking, the Design and Construction Resource Bureau can manage around 140 projects at a time. The Bureau is funded by fees paid to the Bureau for project management services. The rate for FY 2020 is \$90 per hour and will increase to \$95 per hour in FY 2021. The FY 2019 budget for the Bureau was approximately \$1.0 million.

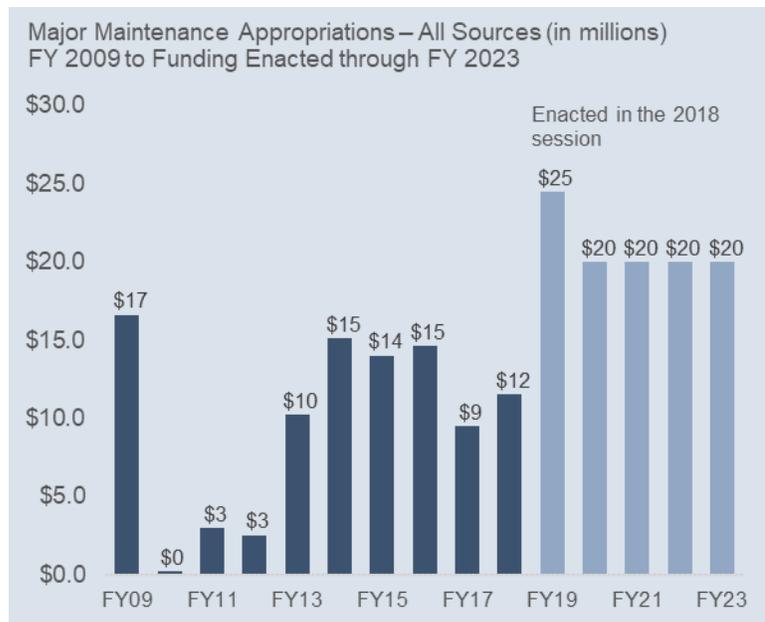
According to the DAS, the rate is based on actual expenditures and is billed to the infrastructure projects.

The Bureau is responsible for the assessment and ranking of project requests.² The Bureau categorizes each project as follows ([procedures](#)):

- Threats to health, life, and safety, and emergency repairs.
- Nonemergency repairs to prevent building deterioration.
- Upgrades to increase accessibility and compliance in accordance with the federal Americans with Disabilities Act (ADA).
- Scheduled maintenance to prolong equipment life.
- Projects to increase operational or energy efficiency.
- Building demolition for unused buildings.

Funding

Major maintenance is funded through annual appropriations made by the General Assembly to the DAS. The chart to the right tracks the history of major maintenance appropriations. Since FY 2009, the Rebuild Iowa Infrastructure Fund (RIIF) has been the single largest source of funding for major maintenance. Between FY 2009 and FY 2012, major maintenance funding was provided primarily through bond proceeds. Between FY 2013 and FY 2019, \$102.0 million, or 87.4%, of appropriations for major maintenance were funded by the RIIF. In the 2018 Legislative Session, major maintenance appropriations were enacted for five consecutive years. In total, \$104.5 million has been appropriated from FY 2019 to FY 2023. This five-year period represents the largest level of sustained funding appropriated for major maintenance projects.



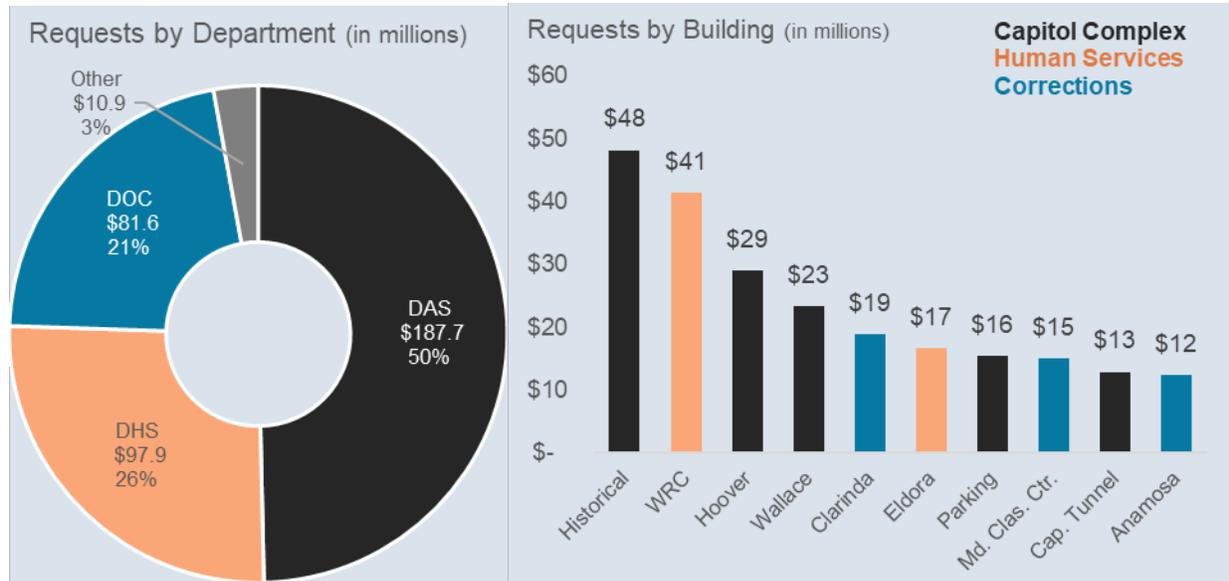
² Project requests on the Capitol Complex are determined by the DAS.

CURRENT SITUATION

The most recent version of the major maintenance list was provided to the Legislative Services Agency in August 2019. State agencies submitted projects totaling \$378.2 million to the DAS to be included on the major maintenance list. The types of projects by priority are provided in the chart to the right. The DAS anticipates that moneys appropriated through FY 2023 will fund \$72.6 million of the projects categorized as damage. Currently, there are no projects considered life/health and safety. This leaves \$305.6 million in projects that are otherwise classified and unfunded.



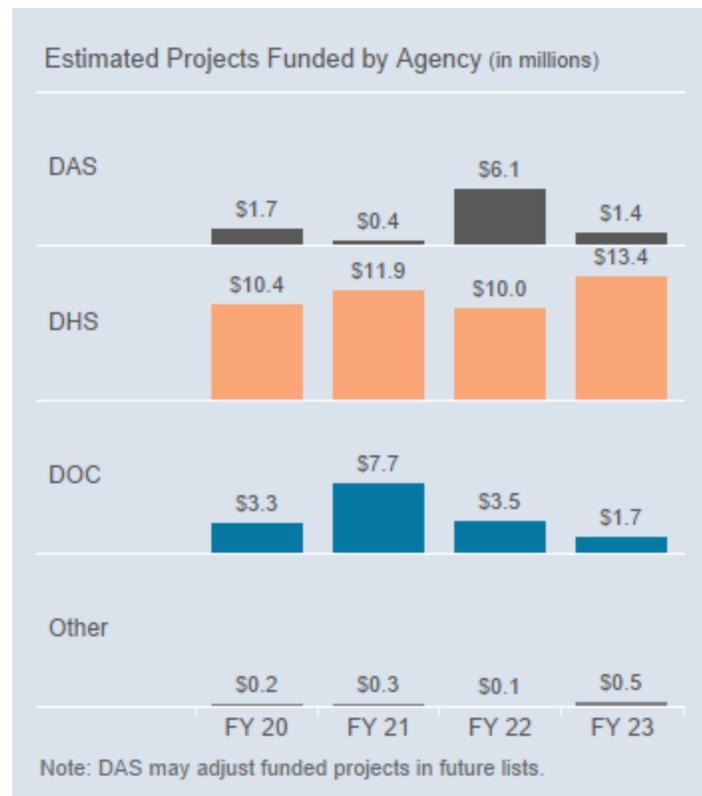
The current major maintenance list has 460 projects (including one contingency project). As previously noted, the DOC (5.3 million square feet) and the DHS (3.4 million square feet) comprise the majority of square feet on the major maintenance list. Significantly, the Capitol Complex comprises the majority of the major maintenance list projects despite only totaling 17.4% of the total square footage. Other facilities may have significant projects that will be submitted in the future, but that is currently unknown. Not all agencies have the same resources dedicated to facilities management, and more significant projects may be added in future versions. The chart below reflects \$378.2 million in project requests classified by building. For several of these buildings, major components of the facility need replacement. The State Historical Building has a number of failing components, the Woodward Resource Center (WRC) has failing utility tunnels, and both the Hoover Building and Wallace Building have planned HVAC replacements with estimated costs of \$23.3 million and \$20.2 million, respectively.



The chart to the right shows estimated costs for projects that the DAS expects to be funded by fiscal year and the department that manages the building. Although the DAS has identified the order in which requests will be funded, the plan may change as projects are reevaluated, new projects are requested, and alternatives are identified. A few of the major planned projects in this time frame include a utility decentralization at the Woodward Resource Center, a tunnel decentralization at the State Training School, and repair of the State Historical Building roof. In total, projects by department include \$45.7 million for the DHS, \$16.2 million for the DOC, \$9.6 million for the DAS, and \$1.1 million for other State agencies.

Options to renovate State facilities on the major maintenance list have been discussed in recent years. The

Governor has recommended remodeling the existing State Historical Building, and the 2019 Legislature established a task force to consider relocating the State Historical Building to the Iowa State Fairgrounds. The funding required to renovate the State Historical Building and remove it from the major maintenance list could vary from just under \$50.0 million (the cost to fix the current property) to over \$100.0 million, the expense to build a new structure based on prior design work. Though recent estimates have not been made, the Wallace Building was considered for a renovation in 2012 and 2013. The DAS has estimated the cost to renovate the Wallace Building at \$60.0 million.



SCENARIOS

This section will model the future balance of the major maintenance list using six different funding scenarios. The projections incorporate four variables: two that are adjusted in the estimate and two that are static in the estimate.

Adjusted Variables (Variables are under control of the General Assembly.)

- 1. Annual Funding:** The six scenarios will use different levels of funding to forecast the changes to the major maintenance list. With the exception of FY 2020 through FY 2023, which have already been funded, the selected funding level for each scenario will remain static for each year and will not increase with inflation.
- 2. Individually Funded Buildings:** The projections will assess the effects of funding all projects in one facility with appropriations separate from the major maintenance list. Funding a full remodel will remove all projects associated with that building from the major maintenance list. Three of six scenarios will include estimates to renovate the State Historical Building and the Wallace Building. No other estimates for full remodels have recently been completed.

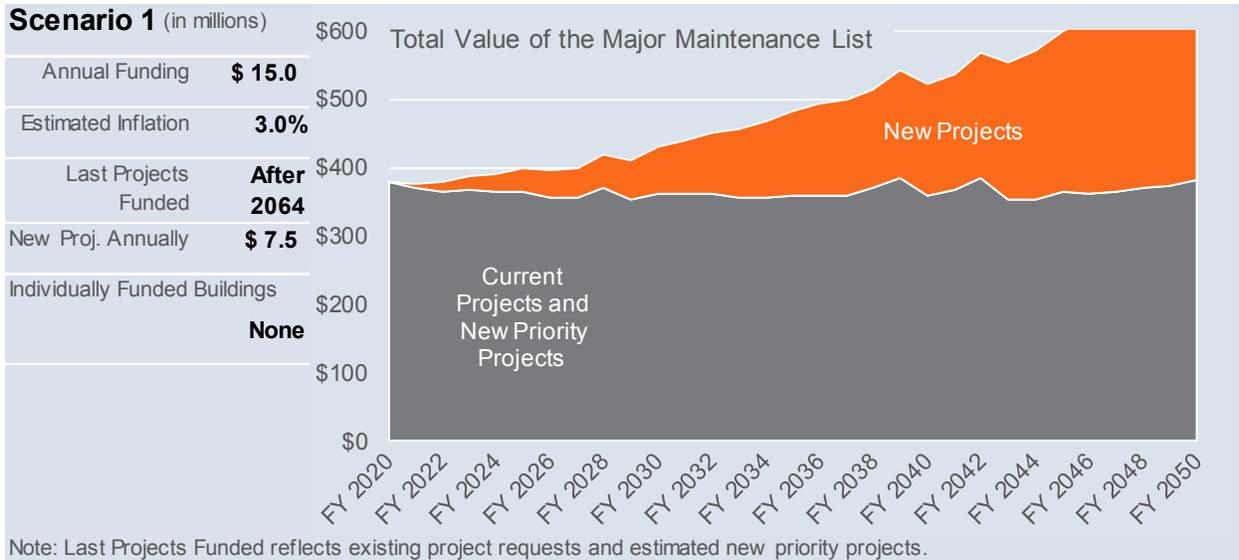
Static Variables (Variables not determined by the General Assembly that cannot be estimated with complete accuracy.)

- 1. Inflation:** Project costs for each scenario are adjusted for inflation. Projects are accounted for individually, meaning that large projects, HVAC being a primary example, may require more than one year of funding. The level of inflation that will occur in the future is difficult to estimate; for the purposes of these projections, inflation is estimated at 3.0%. These projections are unable to account for the fluctuations in the market, which may increase the cost for bids in a given year beyond the expected level of inflation.
- 2. New Projects per Year:** The projections estimate \$7.5 million in projects will be added to the major maintenance list per year and the cost of these projects increases with inflation. It is assumed that 25.0% of the new projects each year will be priority projects and will be funded at the same time as existing projects. These estimates do not account for the failure of major building components that may occur. A recent example of a sudden problem is the black mold issue at the Iowa Law Enforcement Academy, which required immediate mitigation. Funding to renovate this facility was appropriated during the next session in 2018.

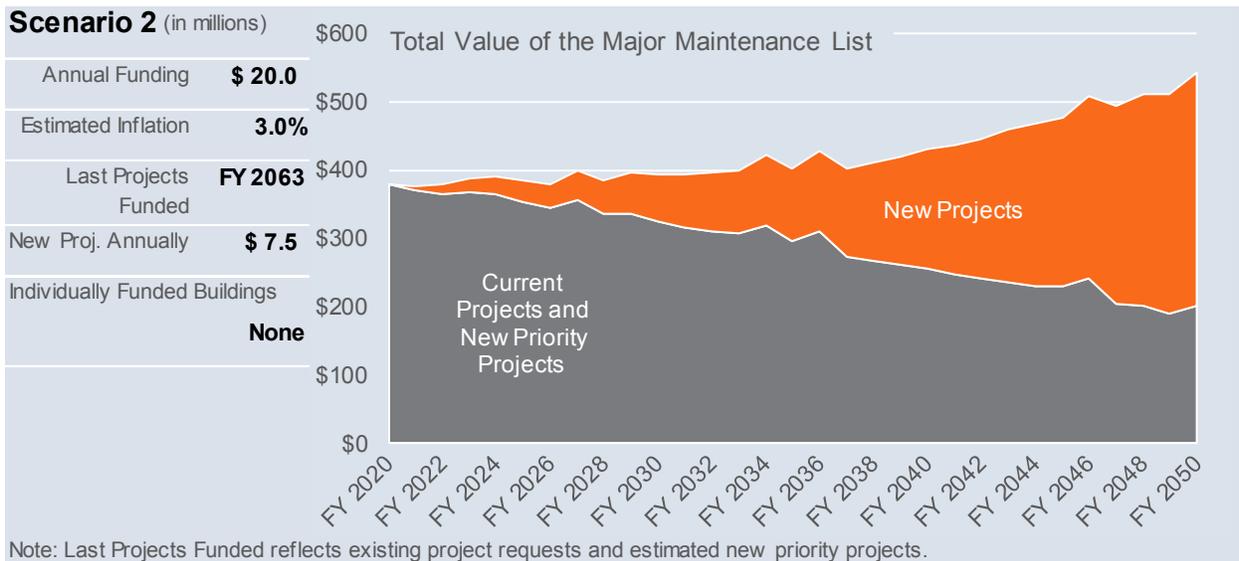
The table below provides a preview of the variables used in each scenario.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Annual Funding	\$15.0 m.	\$20.0 m.	\$25.0 m.	\$25.0 m.	\$25.0 m.	\$25.0 m.
Building Projects	none	none	none	Historical	Wallace	Historical & Wallace
Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
New Projects per Year	\$7.5 m.					

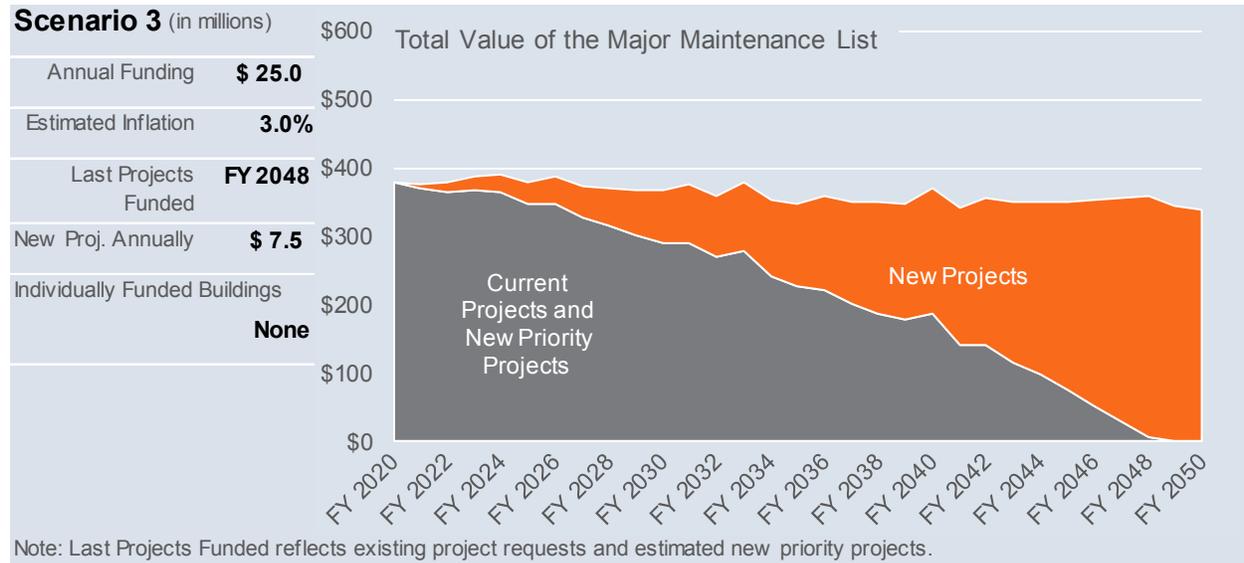
Scenario 1 forecasts the impact to the major maintenance list if the General Assembly were to appropriate \$15.0 million per year in perpetuity. This funding level is close to the average funding that was provided to the major maintenance list per year prior to the multiyear appropriations enacted in FY 2019. In this scenario, the General Assembly does not fund any building projects individually. In this case, the total cost of the major maintenance list (both areas combined) is estimated to increase at an average rate of 2.9%. Due to inflation, annual funding of \$15.0 million per year is estimated to be insufficient to pay down the projects that are currently on the major maintenance list (**gray area** following on the chart). **Scenario 1** is unable to determine if the funding provided in this scenario will be sufficient to eliminate the existing major maintenance backlog.



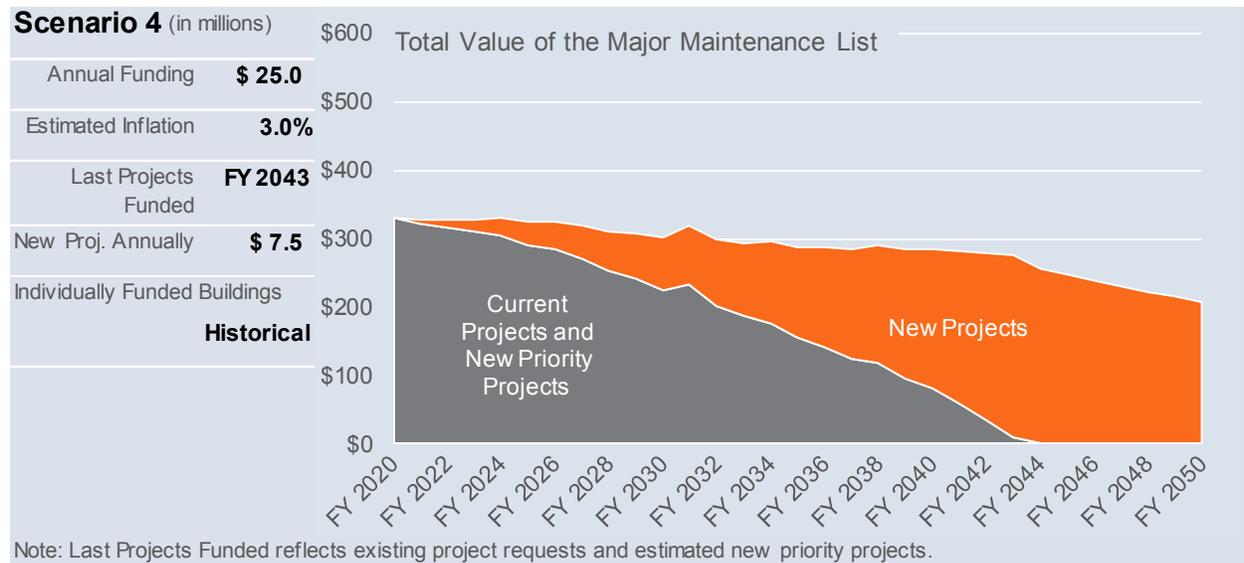
Scenario 2 assumes the General Assembly will appropriate \$20.0 million per year. This funding is close to the average of \$20.9 million in funding appropriated from FY 2019 to FY 2023. In this scenario, the General Assembly does not fund any building projects individually. The total cost of the major maintenance list is estimated to increase at an average rate of 1.8% per year. Due to inflation, annual funding of \$20.0 million per year is estimated to slowly pay down the projects that are currently on the major maintenance list. **Scenario 2** estimates that the current backlog of projects may be eliminated in FY 2063.



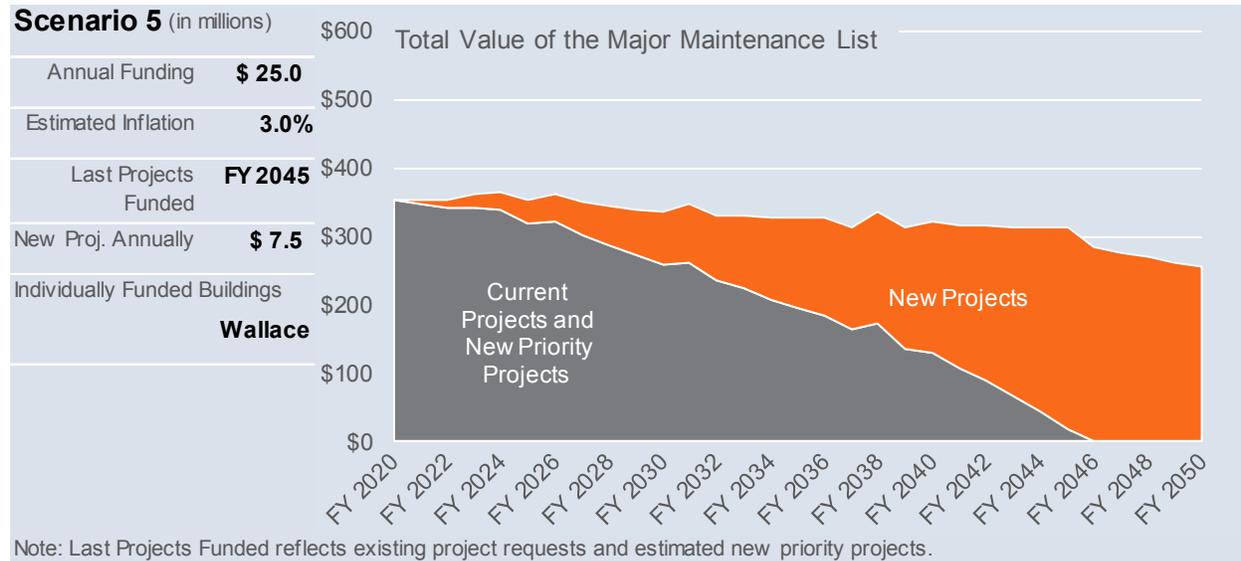
Scenario 3 assumes the General Assembly will appropriate \$25.0 million per year. This funding would be the highest average annual funding level historically ever provided by the General Assembly. In this scenario, the General Assembly does not fund any building projects individually. The total value of the major maintenance list will not grow in this scenario, and the current backlog of projects is estimated to be gradually eliminated. **Scenario 3** estimates that the current backlog of projects may be eliminated in FY 2048.



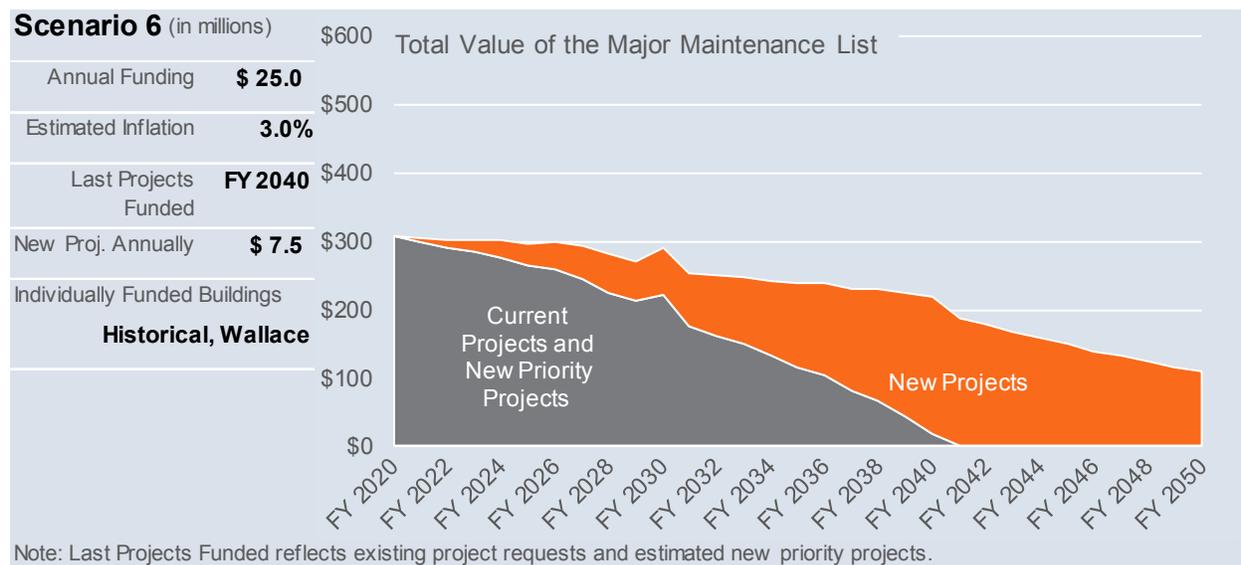
Scenario 4 assumes the General Assembly will appropriate \$25.0 million per year and fund a project that eliminates a \$53.8 million backlog of maintenance associated with the State Historical Building. The funding required to remove the State Historical Building from the major maintenance list could vary from just under \$50.0 million, the cost to fix the current property or over \$100.0 million, the expense to build a new structure based on prior design work. This scenario will require more upfront funding, but will also eliminate the current projects on the list in less than 25 years.



Scenario 5 assumes the General Assembly will appropriate \$25.0 million per year and fund a project that eliminates a \$23.4 million backlog of maintenance associated with the Wallace Building. The DAS has estimated the cost to renovate the Wallace Building at \$60.0 million. Again, this scenario will require substantial upfront funding, but will prevent growth in the total value of the major maintenance list. The list of existing projects could be eliminated by FY 2045 under this scenario.



Scenario 6 forecasts the impact to the major maintenance list if the General Assembly appropriates \$25.0 million per year in perpetuity and funds a project that eliminates the maintenance backlogs associated with the Wallace and State Historical Buildings. The total estimated upfront cost for both of these buildings could range from \$110.0 million to \$160.0 million. Any appropriations for these buildings will require appropriations over several years. Again, this scenario will require substantial upfront funding, but prevent growth in cost of the major maintenance list. The list of existing projects could be eliminated by FY 2042 under this estimate.



ALTERNATIVES

This **Issue Review** assesses options for paying down the current major maintenance list. However, making large appropriations for major maintenance is not the only method that the General Assembly can use to address the maintenance backlog, and may not be the most cost efficient. Determining the best method to eliminate a maintenance backlog is beyond the scope of this **Issue Review**, but a few examples of different strategies will be discussed in this section.

Major Maintenance List and Renovations. The General Assembly may consider if the major maintenance list is the best method to repair and maintain State buildings. Such an endeavor will require the cooperation of the DAS and potentially outside consultants (which may require additional funding). In certain circumstances, complete facility renovations may be more cost effective and efficient than replacing major building components as funding becomes available.

The General Assembly may also consider enacting further multiyear appropriations. Stable and predictable funding will allow the DAS to conduct multiple projects simultaneously on a single facility, potentially reducing the overall cost of two or more projects.

Facility Assessments. The General Assembly could fund comprehensive building assessments for major departments including the DOC, the DHS, and the Capitol Complex. For example, the assessment could develop routine maintenance targets that would provide funding goals for the General Assembly to appropriate. Routine maintenance is recurring preventive maintenance that can prevent or slow the degradation of building components. In 2012, the Baker Group completed a white paper for the Capitol Complex that provided a target for routine maintenance funding for buildings on the Capitol Complex. No such analysis has been completed in the past five years for facilities occupied by the DOC and the DHS.³

Capital Assets Database. The National Association of State Budget Officers (NASBO) released a report in 2014 regarding capital budgeting in the states.⁴ This report considers the creation of a capital asset inventory as a best practice.⁵ Iowa was reported as one of six states that does not have a capital asset database. The DAS does have some of the components of a capital asset database and has continued to collect additional information regarding state facilities. Items included on lists maintained by other states include facility age, condition, degree of use, operating costs, and replacement cost.

Alternative Construction Methods. The General Assembly could allow the DAS to examine alternative construction methods when considering remodels. In 2012, the DAS contracted with construction management companies, which developed scenarios to remodel the Wallace Building. As an example, one scenario proposed selling the Wallace Building to a developer which, in turn, would remodel or demolish and rebuild the Wallace Building and rent the facility back to the State. The report also reviewed the cost to demolish and rebuild the facility under the ownership of the State. However, alternative methods of construction may not be ideal for all facility types.

Alternative Financing Methods. The General Assembly could consider the issuance of revenue bonds to fund the major maintenance list and the replacement or remodel of certain facilities. Most recently, the General Assembly issued bonds in 2010 to fund the construction of Fort Madison (Iowa State Penitentiary). The last payment for these bonds will be in FY 2027.

Leasing Office Space. The General Assembly could consider leasing additional office space for State agencies. Currently, a number of State agencies lease space in Des Moines and elsewhere.

³ If DHS and DOC facilities are studied in more detail, it may be necessary to also review the suitability of each facility for the mission it is performing. A building may be in fine physical condition but unsuited for the function for which it is used.

⁴ National Association of State Budget Officers, Capital Budgeting in the States, www.nasbo.org/mainsite/reports-data/capital-budgeting-in-the-states, May 2014.

⁵ Capital asset inventories are inventories of long-term assets that are generally property, buildings, or other fixed assets.

CONCLUSION

The table below compares estimates from each scenario. Funding levels at or near historic levels (\$15.0 million per year) will not eliminate the existing list of projects even after 45 years of sustained appropriations. It is estimated that annual funding of at least \$25.0 million per year will be necessary to eliminate the existing maintenance backlog within 25 years. Additional upfront funding to renovate existing properties would accelerate the pace at which maintenance projects can be addressed. The State Historical Building's list of major maintenance requests currently exceeds \$48.2 million; it is the facility with the largest value of requests.

Major Maintenance Funding Scenarios

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Annual Funding	\$15.0 m.	\$20.0 m.	\$25.0 m.	\$25.0 m.	\$25.0 m.	\$25.0 m.
Current List Completed and New Priorities	After FY 2064	FY 2063	FY 2048	FY 2043	FY 2045	FY 2040
Cost to Complete Current List (plus inflation)	\$910.7 m.	\$689.2 m.	\$593.7 m.	\$539.0 m.	\$542.1 m.	\$511.9 m.
Estimated Facility Renovations	\$0	\$0	\$0	\$50.0 m.	\$60.0 m.	\$110.0 m.
Facilities Renovated	none	none	none	Historical	Wallace	Historical & Wallace

The analysis presented in this **Issue Review** suggests that current methods for funding major maintenance will require sustained long-term funding to eliminate projects in less than 30 years.

LSA Staff Contact: Adam Broich (515.281.8223) adam.broich@legis.iowa.gov

1050192

Appendix A — Facts and Figures

Other State Agencies Not on Major Maintenance List

Independently Managed Maintenance

Board of Regents	39,774
Department of Public Defense	4,100
Department of Transportation	4,074
Department of Natural Resources	2,772
Community-Based Corrections	663
Judicial Branch	125
Department for the Blind	119
Iowa Public Employee Retirement Sys.	46
Iowa Finance Authority	31

Agencies on Capitol Complex and Iowa Labs

Capitol Complex Occupants

Dept. of Agriculture and Land Stewardship	Department of Transportation
Attorney General	Economic Development Authority
Auditor of State	Governor/Lt. Governor's Office
Board of Parole	Governor's Office of Drug Control Policy
Civil Rights Commission	Homeland Security and Emergency Mgmt.
Department of Administrative Services	Judicial Branch (ineligible for Major Maintenance)
Department on Aging	Legislative Branch
Department of Commerce	Department of Inspections and Appeals
Department of Corrections	Iowa Commission for the Blind
Department of Cultural Affairs	Iowa Ethics and Campaign Disclosure Board
Department of Education	Iowa Telecommunications and Tech. Comm.
Department of Human Rights	Iowa Workforce Development
Department of Human Services	Office of the Chief Information Officer
Department of Management	Public Employment Relations Board
Department of Natural Resources	Public Information Board
Department of Public Health	Secretary of State
Department of Public Safety	State Library
Department of Revenue	Treasurer of State

Iowa Lab Occupants

Dept. of Agriculture and Land Stewardship
Department of Public Health
Department of Public Safety
University of Iowa